



**TAHOE  
CLIMATE  
RESILIENCE  
ACTION  
STRATEGY**



**THE LAKE TAHOE CLIMATE RESILIENCE ACTION STRATEGY** builds on existing Tahoe Basin climate and environmental improvement plans to identify five focus areas that will advance equity, create jobs, and build resilience for the Basin's extraordinary natural resources, 57,000 residents, and an economy that supports 15 million annual visitors. We must act now to preserve and protect Lake Tahoe for this and future generations.

**1. Build Sustainable Recreation and Transportation Systems:** Upgrade recreation and transportation facilities to prepare for longer summers, shorter winters, fluctuating lake levels, and changes in visitor patterns. Invest in projects that expand equitable access like bike paths, accessibility improvements, and tribal interpretive sites.

**2. Reduce Wildfire Risk and Build Forest Resilience:** Implement unfunded thinning and forest restoration projects to protect communities from wildfire and improve forest health. Restore burned forests. Continue implementing the Lake Tahoe Forest Action Plan.

**3. Increase Watershed Resilience and Biodiversity:** Restore wetlands, streams, and meadows. Prevent and control aquatic

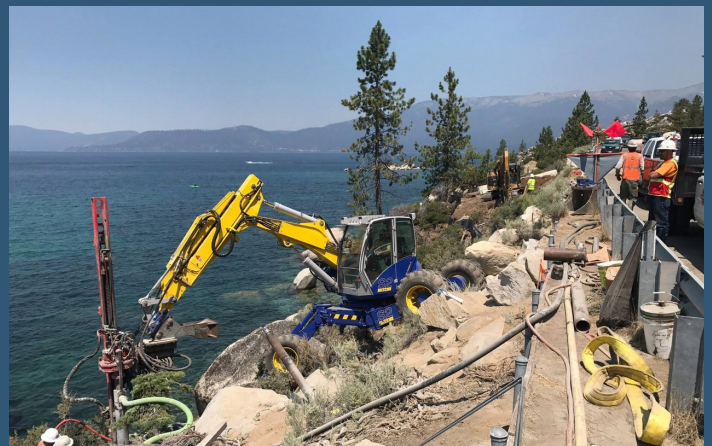
invasive species. Help wildlife, natural infrastructure, and culturally significant places withstand droughts, fire, and warming temperatures, while storing more carbon in meadows and forests.

**4. Upgrade Infrastructure and Protect Vulnerable Communities:** Prepare for wildfire and extreme weather by upgrading water, sewer, broadband, and power infrastructure; building community resilience centers; planning for emergencies; and expanding electric vehicle charging and solar energy adoption.

**5. Advance Science, Stewardship, and Accountability:** Guide and protect Tahoe climate investments through cutting-edge research, monitoring, and adaptive management.



*Retrofitting recreation infrastructure to handle fluctuating lake levels safeguards the region's economy and protects public access. Photo: Pier at Kings Beach State Recreation Area*



*Retrofitting roads to withstand extreme weather protects people and infrastructure investments. (Photo: Construction along NV State Route 28, Nevada Department of Transportation)*



Photo by Lake Tahoe Water Trail

## TAKING AN INTEGRATED APPROACH TO BUILDING RESILIENCE

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### LAKE TAHOE

including its chemistry, hydrology, water quality, and native fish.



### FORESTED UPLANDS

including vegetation, wildlife, and groundwater.



### COMMUNITIES

including cultural landscapes, public health and safety, recreation, and water, power, communication, and transportation infrastructure.

Building resilience at Tahoe focuses on three main systems: **Lake Tahoe**, **Forested Uplands**, and **Communities**. Projects within each system yield multiple benefits and advance California and Nevada priorities, such as:

**Expanding** public access for people of all races, cultures, incomes, and abilities.

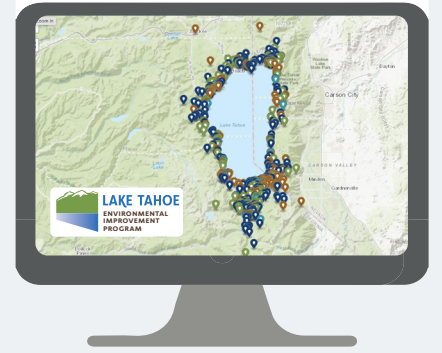
**Elevating** the role of natural lands in fighting climate change and advancing biodiversity conservation through land conservation.

**Restoring and using** natural infrastructure like wetlands, beaches, and forests to boost resilience to drought, flood, extreme heat, and changing visitor patterns.

**Safeguarding** jobs, rural economies, and vulnerable communities, and advancing equity.

## TAHOE HAS SHOVEL-READY CLIMATE RESILIENCE PROJECTS

The Lake Tahoe Environmental Improvement Program (EIP) is an unparalleled partnership working to achieve the region's environmental goals. The EIP Project Tracker serves as a clearinghouse of information on past accomplishments as well as proposed, shovel-ready projects at Tahoe: [eip.laketahoeinfo.org](http://eip.laketahoeinfo.org).



## CLIMATE PLANNING AT LAKE TAHOE

**Tahoe Climate Resilience Action Strategy:**  
Strategies and resources needed to adapt

**Tahoe Climate Adaptation Primer + Tahoe Climate Adaptation Action Portfolio:**  
Ongoing and planned actions to accelerate adaptation

**Integrated Vulnerability Assessment:**  
Scientific assessment of climate threats at Tahoe

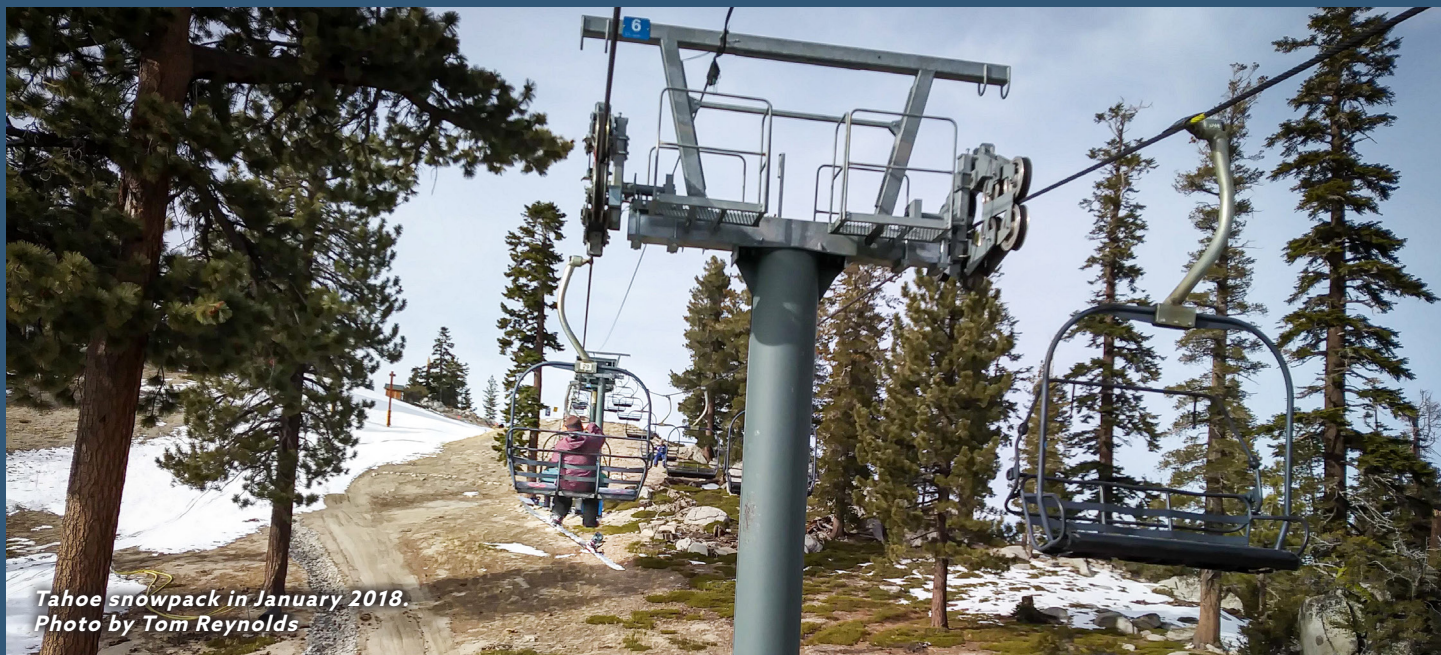
**Foundational Plans:** Nevada State Climate Strategy, California Climate Adaptation Strategy, Lake Tahoe Regional Plan, and Sustainability Action Plan, alongside local plans provide frameworks for climate resilience at Tahoe.

Find these and other climate resilience planning documents at [trpa.gov/climate-resilience](http://trpa.gov/climate-resilience).



Photo by Tahoe Regional Planning Agency

# COST OF CLIMATE IMPACTS ON PEOPLE



Tahoe snowpack in January 2018.  
Photo by Tom Reynolds

**Wildfire, landslides, avalanches, and floods** threaten the safety of Tahoe's residents and visitors and the infrastructure they rely on.

Annual road damages are increasing and could exceed \$75 million by 2100. It would cost three times less to protect infrastructure from floods than to pay for damages from a major flood.

Each year, 15 million people visit Tahoe, including hundreds of thousands on busy summer weekends. Wildfire, smoke, and extreme weather events threaten public health and safety.

**Winter recreation** seasons are already shorter and will be cut in half by 2100, causing the ski industry \$268 million in annual losses.

**Loss of lake clarity** due to warming water temperatures will impact the region's \$5 billion tourism-based economy.

**Housing costs** will rise because people move from hotter cities to Tahoe. Higher costs displace Tahoe's workforce and underserved populations.

**Wildfire** threatens \$26.9 billion in property value. Each \$1 million invested in climate adaptation projects will reduce property damage by \$10 million.

**Meadow degradation** threatens sites that are culturally significant to the Washoe Tribe of Nevada and California (Washoe Tribe).






The 2021 Caldor Fire demonstrated the urgent need to reduce wildfire risk and improve forest resilience.



Extreme weather increases the risk of landslides damaging roads. Photo: Nevada Department of Transportation

# SHARED FUNDING NEEDS 2022-2031

Now is the time to confront the climate crisis. Tahoe partners have identified shovel-ready projects within the five focus areas below to make our communities and natural resources more resilient to climate change. Partners determined funding needs for each strategy based on Lake Tahoe Basin plans and project lists such as the Lake Tahoe Environmental Improvement Program, Tahoe Climate Adaptation Action Portfolio, the Lake Tahoe Forest Action Plan, and Lake Tahoe Aquatic Invasive Species Action Agenda.

Improving Resilience at Lake Tahoe		Total Needed	Annually 2022-26	Annually 2027-31
	Build Sustainable Recreation and Transportation Systems	\$125 M	\$16 M	\$9 M
	Reduce Wildfire Risk and Build Forest Resilience	\$65 M <i>Reflects unfunded need considering 2021 state and federal investments in this category</i>	\$4 M	\$9 M
	Increase Watershed Resilience and Biodiversity	\$90 M	\$12 M	\$6 M
	Upgrade Infrastructure and Protect Vulnerable Communities	\$102 M	\$13 M	\$7.4 M
	Advance Science, Stewardship, and Accountability	\$16 M	\$1.6 M	\$1.6 M
<b>TOTAL:</b>		<b>\$398 M</b>	<b>\$46.6 M</b>	<b>\$33 M</b>



# REGIONAL COORDINATION IS IN TAHOE'S DNA

The EIP serves as the backbone for regional climate adaptation coordination. Federal, tribal, state, local, and private partners have collaborated since 1997 to restore the environmental health of Lake Tahoe. Together, EIP partners have made progress—the Lake's clarity loss has stabilized, mountain streams are clearer, and forest management is underway. Continued investment will help build on the EIP's progress and create a more resilient landscape at Tahoe. Learn more at [LakeTahoelInfo.org](http://LakeTahoelInfo.org).



**LAKE TAHOE**  
ENVIRONMENTAL  
IMPROVEMENT  
PROGRAM

## Lake Tahoe EIP Partner Organizations Include:

### FEDERAL AGENCIES

U.S. Army Corps of Engineers  
Bureau of Land Management  
Bureau of Reclamation  
Federal Highway Administration  
Federal Transit Administration  
Natural Resources Conservation Service  
National Aeronautics and Space Administration (NASA)  
USDA Forest Service  
U.S. Environmental Protection Agency  
U.S. Geological Survey  
U.S. Fish and Wildlife Service

### TRIBAL

Washoe Tribe of Nevada and California

### STATES OF CALIFORNIA AND NEVADA CAL FIRE

California Air Resources Board  
California Conservation Corps  
California Department of Fish and Wildlife  
California Department of Water Resources  
California Environmental Protection Agency  
California Natural Resources Agency  
California State Lands Commission  
California State Parks  
California Tahoe Conservancy  
California Wildlife Conservation Board  
Caltrans  
State of California Lahontan Regional Water Quality Control Board

University of California, Davis Tahoe Environmental Research Center

Nevada Department of Conservation and Natural Resources  
Nevada Division of Forestry  
Nevada Division of State Lands  
Nevada Division of State Parks  
Nevada Department of Wildlife  
Nevada Department of Transportation  
Nevada Division of Environmental Protection  
Nevada Public Utilities Commission  
University of Nevada, Reno  
Desert Research Institute

### REGIONAL AGENCIES

Tahoe Regional Planning Agency  
Tahoe Transportation District

### LOCAL GOVERNMENTS/ ORGANIZATIONS

Carson City  
Carson City Fire Department  
Cave Rock Estates General Improvement District  
City of South Lake Tahoe  
Douglas County  
El Dorado County  
Fallen Leaf Fire Department  
Incline Village General Improvement District  
Kingsbury General Improvement District  
Lake Valley Fire Protection District  
Lakeridge General Improvement

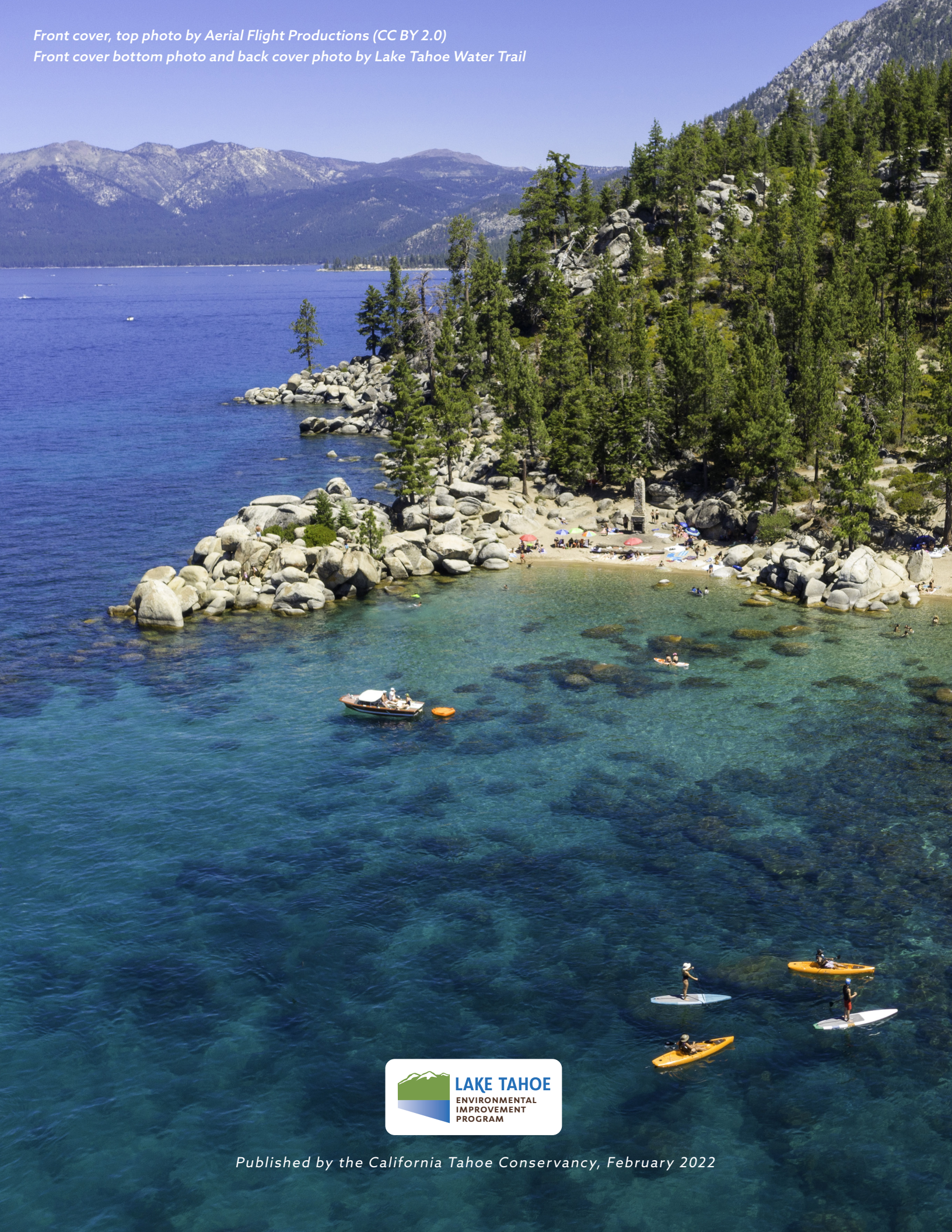
District  
Meeks Bay Fire Protection District  
Nevada Tahoe Conservation District  
North Lake Tahoe Fire Protection District  
North Lake Tahoe Resort Association  
North Tahoe Fire Protection District  
North Tahoe Public Utility District  
Placer County  
Round Hill General Improvement District  
South Tahoe Public Utility District  
Tahoe Science Advisory Council  
Tahoe City Public Utility District  
Tahoe Douglas Fire Protection District  
Tahoe Resource Conservation District  
Town of Truckee  
Washoe County

### PRIVATE ENTITIES

Edgewood Companies  
Heavenly Mountain Resort  
Lake Tahoe Marina Association  
Lake Tahoe South Shore Chamber of Commerce  
League To Save Lake Tahoe  
Liberty Utilities  
NV Energy  
Sugar Pine Foundation  
Tahoe Fund  
Tahoe Institute for Natural Science  
Tahoe Keys Property Owners Association  
Tahoe Lakefront Owners' Association  
Tahoe Partnership  
Tahoe Rim Trail Association



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